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GRAPHIC ARTS COMPOSING EQUIPMENT INSTALLED IN MEDLARS

The installation of the Nation's fastest computer-driven phototypesetter, as a part of the Medical Literature Analysis and Retrieval System (MEDLARS), has been announced by Dr. Martin M. Cummings, Director, National Library of Medicine.

Called Graphic Arts Composing Equipment (GRACE), the computer-driven printer operates at the rate of 300 characters, or approximately 60 five-letter words, per second, or 3,600 words per minute. This is more than twenty-five times faster than previous phototypesetters.

"Speed is one of the real needs in the handling of scientific information today," Dr. Cummings said. "GRACE represents a breakthrough in printing technology, and I know of no area more important for its use than in the production of materials for medical scientists, teachers and practitioners."

GRACE is employed by MEDLARS to print Index Medicus, NLM's monthly listing of the world's medical literature, and recurring bibliographies in special biomedical fields. Unlike the standard computer printout, GRACE uses three fonts of type in six-point, ten-point and fourteen-point sizes, in both upper and lower-case. The three fonts contain a total of 226 characters, including special characters such as diacritical marks for the vernacular titles of certain foreign language articles.

The first issue of Index Medicus has been produced by GRACE for August of this year. It is a 609-page document, containing 13,733 different citations from the biomedical literature and a total of approximately 69,000 subject and author descriptive entries. It contains more than 9,000,000 characters or approximately 1,800,000 five-letter words. GRACE processed this quantity of material in approximately 16 hours, including set-up, running and correction time.

"We feel that the August issue of Index Medicus is something of a historic document," Dr. Cummings said, "because of its great significance both to medicine and printing."

MEDLARS is a system for the storage and retrieval of bibliographic citations from the world's biomedical literature. Citations prepared by literature analysts are stored on magnetic tape in a Honeywell 800 computer and retrieved electronically for different information purposes. More than half of the citations contained in MEDLARS are from the foreign biomedical literature.

In addition to Index Medicus and recurring bibliographies, MEDLARS can handle individual questions, called demand searches, on the contents of the literature in particular areas in terms of different scientific fields, languages or time periods.

For recording the results of demand searches, MEDLARS uses the computer's high-speed printer which produces a block letter of 10-point size, uppercase only, at the rate of approximately 21,000 five-letter words per minute.

For composing copy to be published in greater quantity, MEDLARS uses GRACE. Printing from the computer without interfering with the computer's own operations, GRACE contains three components: a magnetic tape transport; an electronic control unit; and an optical unit. The output is in the form of rolls of positive film prints in nine-inch widths, with the type in three columns. After the film rolls are developed, they are printed through an offset process on pages nine inches wide by 11-3/4 inches deep.

GRACE is housed in two pieces of equipment on the floor of the MEDLARS computer room. One piece measures 56 inches by 54 inches by 36 inches, the other 54 inches by 72 inches by 37 inches.

GRACE was developed for NLM by the Photon Corporation, Wilmington, Massachusetts, under subcontract to the General Electric Corporation, which was the MEDLARS contractor, and bears the manufacturer's name of Photon 900.

(Fact sheets on GRACE are available on request from the Assistant to the Director, National Library of Medicine.)

RSD GETS NEW CHIEF

The appointment of David Abraham Kronick, Ph.D., Director of the Cleveland Medical Library Association, as Chief of the Reference Services Division, has been announced by Dr. Martin M. Cummings, Director, NLM. He succeeds Dr. Joseph H. Roe, Jr., who resigned to return to private practice in Virginia.

Dr. Kronig has had a wide variety of library experience, including three years at the National Library of Medicine, where he was employed as a

reference librarian. He has also worked as a librarian at Western Reserve University Library and at the Medical Center of the University of Michigan, Ann Arbor, and he has done work as a cataloger for the National Society for Crippled Children in Chicago, Illinois.

Dr. Kronick was born in Connelsville, Pennsylvania in October, 1917. He received a B.A. in 1939 and a B.L.S. in 1940 from Western Reserve University, Cleveland, Ohio, and a Ph.D. in Library Science from the University of Chicago in 1956.

He is a Fellow of the American Association for the Advancement of Science, a member of the Board of Directors of the Medical Library Association, and President of the Medical Library Association of Northern Ohio. He is a member of the American Association for the History of Medicine, the American Documentation Institute, the American Library Association, and the Medical Library Association. His articles have appeared in many library journals, and he is a book reviewer for the Library Journal.

CIVIL SERVICE ATTEMPTS REVISION OF STANDARDS FOR LIBRARIANS

The Standards Division of the Civil Service Commission recently asked Library related organizations to comment upon a draft of revised occupational and classification standards for the Librarian Series and the Library Assistant Series. Occupational standards determine the amount and the type of experience required for appointment to a Civil Service post. Classification standards determine grade level and salary.

The following statements are quoted from the Standards Division's analysis of outside comments.

"For the Librarian Series, comments centered primarily on (1) the definition of librarianship; (2) the use of quantitative criteria for grading the libraries; (3) insufficient recognition of work in 'special' libraries; (4) omission of information, storage and retrieval or mechanized activities.

"A few did not agree with the proviso that only eligibles with the required credits in library science, or those who passed the equivalency test, could be appointed to librarian positions.

"There was major disappointment centering around confinement of the standard to Library Assistant positions, with no provision for recognizing work considered of a higher grade level being performed by non-professional employees."

The Civil Service Commission report concludes with the announcement that the drafts will be extensively revised for further comment. In the meantime present classification standards remain in effect.

DEMAND BIBLIOGRAPHIES PRODUCED BY MEDLARS

Following is a continuation of the lists of demand searches produced by the Library's MEDLARS system. The searches have been carried out along very specific lines as prescribed by the requesters in different scientific fields. They therefore are not intended to be comprehensive, since the requester may have specified limitations in terms of subject matter, languages, time or other considerations. For these reasons, they are not available for distribution.

The first part of this list appeared in the National Library of Medicine NEWS, VOL. XIX, No. 7, July, 1964. Other lists will follow in succeeding issues of the NEWS.

SUBJECTS

Sudden death in infants and children

Ulcerative colitis and inflammatory disease of intestines in general

Relationship between infectious diseases, mental retardation and other central nervous system abnormalities

Learning and cognition in relation to infectious diseases

Electroencephalography in infectious disease, especially in relation to mental deficiency

Innate salt appetite, aldosterone secretion, renin and angiotensin

Fatty acids or adipose tissue

Venereal disease

Hereditary and environmental relationships in schizophrenia, especially schizophrenia in twins

Reaction time in relation to galvanic skin response

Heart block and the use of artificial pacemakers

Lasers and neoplasms

Drug-induced blood dyscrasias

Nucleic acid bibliography with selected journals excluded

RECENT MLA APPOINTMENTS

The Medical Library Association has announced the following committee appointments: Mr. Scott Adams, Chairman of the Awards Committee; Mrs Maxine Hanke, Chairman of the Subcommittee on Internships for 1964/65; and Dr. John B. Blake, Editor of the Committee to revise the bibliography in the Handbook of Medical Library Practice.

Use of funds for printing this publication approved by the Director of the Bureau of the Budget, January 18, 1963